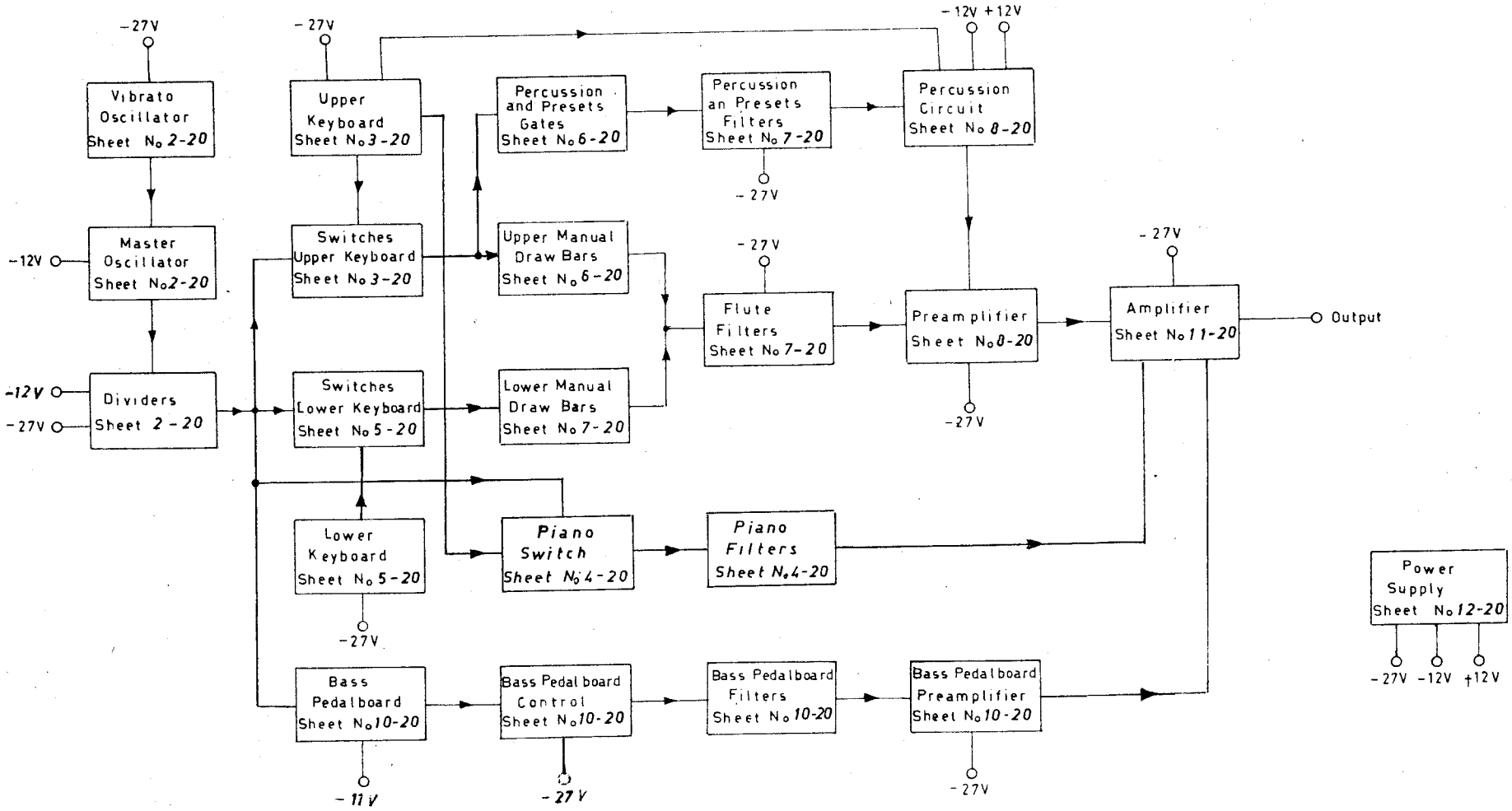
ELKA

X55/P

schematic diagrams

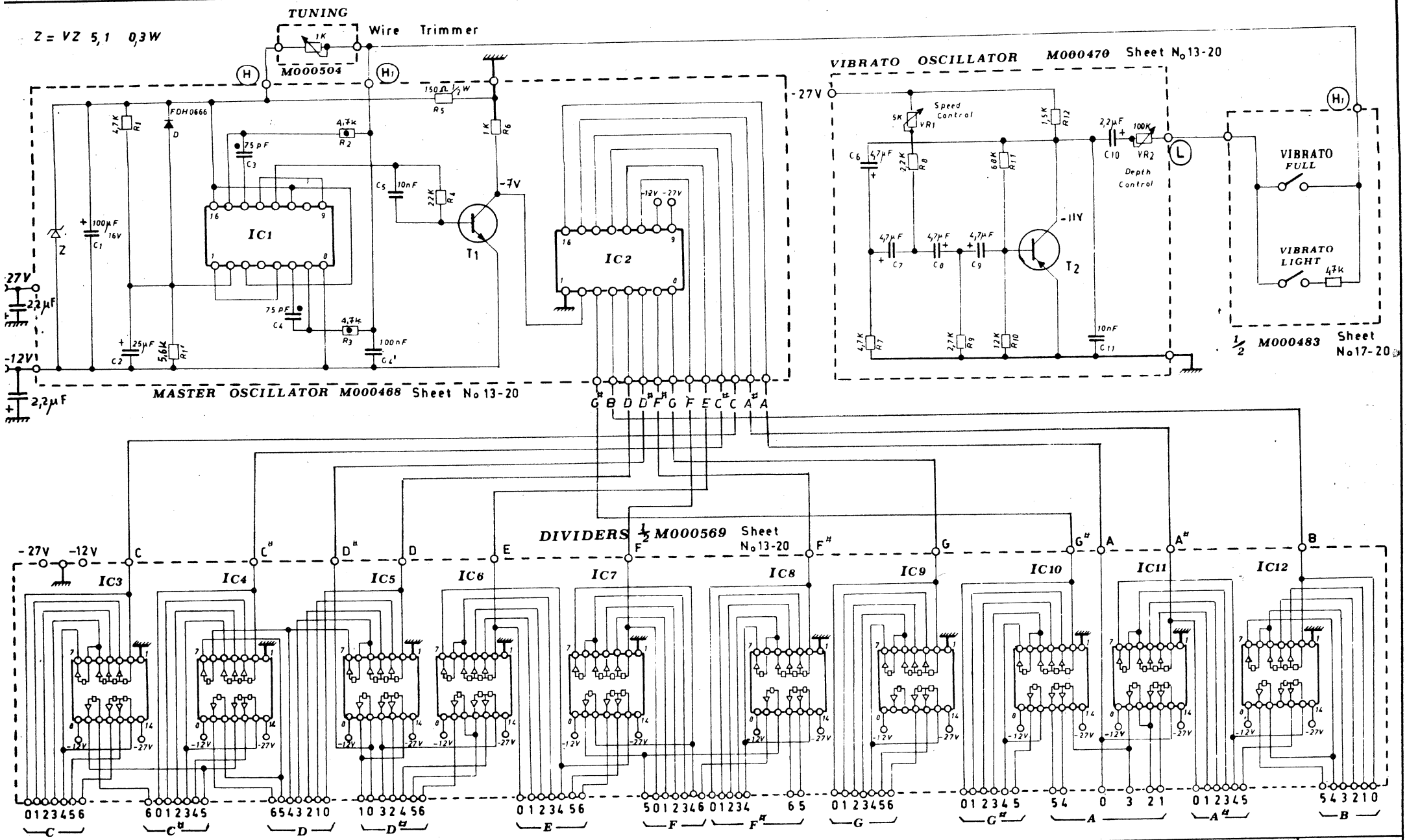


N.B.

1) THE FIRM RESERVES THE RIGHT TO MAKE CHANGES WITHOUT ANY WARNING AND TO THEIR OWN DISCRETION

2) THE TENSIONS ARE MEASURED WHEN THE INSTRUMENT IS TURNED ON BUT NOT PLAYED

Designed by		Model X 55/P	Object: Block Diagram	Sheet No 1-20
Drawn by	Checked by			Date 12-5-75

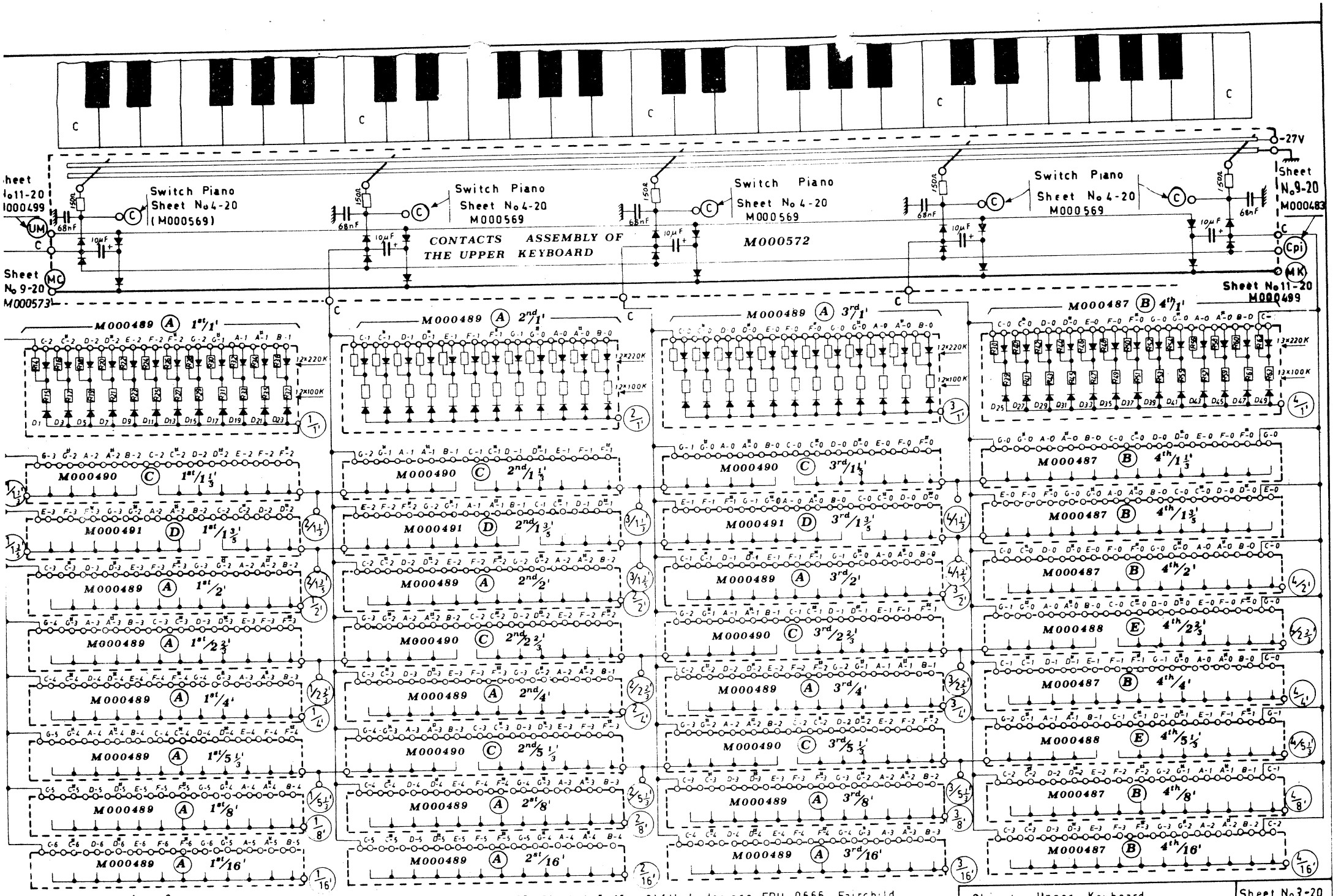


Code	Type	Transistors
T1	NPN	BC 209
T2	PNP	BC 154 Fairchild

IC1 = SN 74221 Texas
IC2 = AY-1-0212 G.I.E.
IC3 ÷ IC12 = AY-5050 G.I.E.

Note:
1) All resistors marked by a point • must be metal film ones 2% tollerance
2) All capacitors marked by a point • must be polistirolo ones 2% tollerance

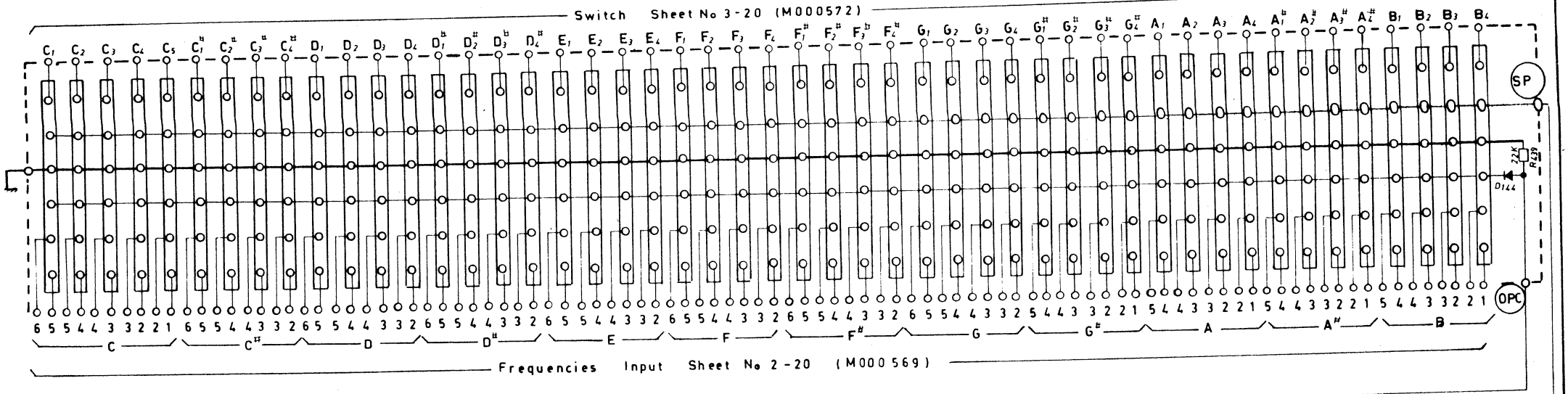
Model	Object:	Sheet No 2-20
X55/P	Master oscillator Dividers and Vibrato	Date 16-10-75



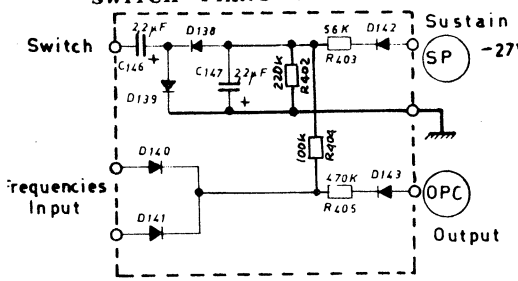
1) The Outputs 1/16 - 2/16 etc..... meant to be connected to board M000475 (Sheet No 5-16) 2) All diodes are FDH 0666 Fairchild

Object: Upper Keyboard	Sheet No 3-20

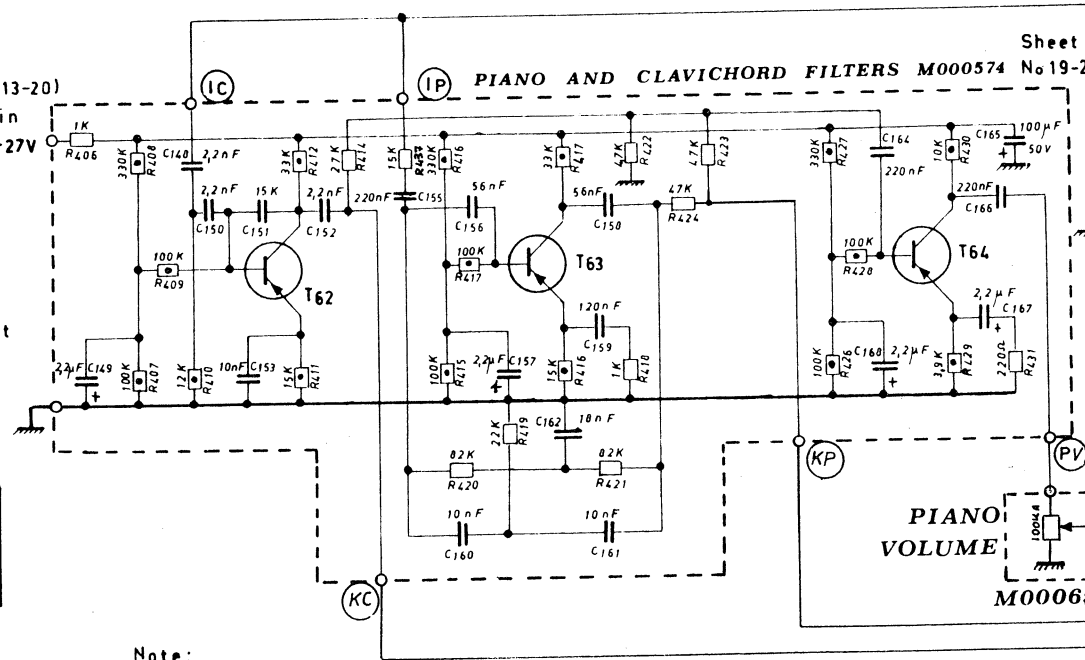
½ M000569 Sheet No 13-20

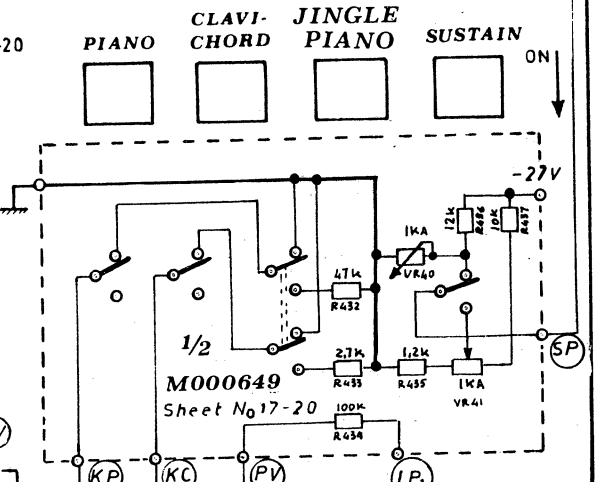

Switch Sheet No 3-20 (M000572)
C1 C2 C3 C4 C5 C1# C2# C3# C4# D1 D2 D3 D4 D1# D2# D3# D4# E1 E2 E3 E4 F1 F2 F3 F4 F1# F2# F3# F4# G1 G2 G3 G4 G1# G2# G3# G4# A1 A2 A3 A4 A1# A2# A3# A4# B1 B2 B3 B4
SP
OPC
D144
C D C# D D# E F F# G G# A A# B
Frequencies Input Sheet No 2-20 (M000569)

SWITCH PIANO M000571 (Sheet No 13-20)



PIANO AND CLAVICHORD FILTERS M000574 Sheet No 19-20





PIANO VOLUME M000650

See Sheet No 11-20 M000481

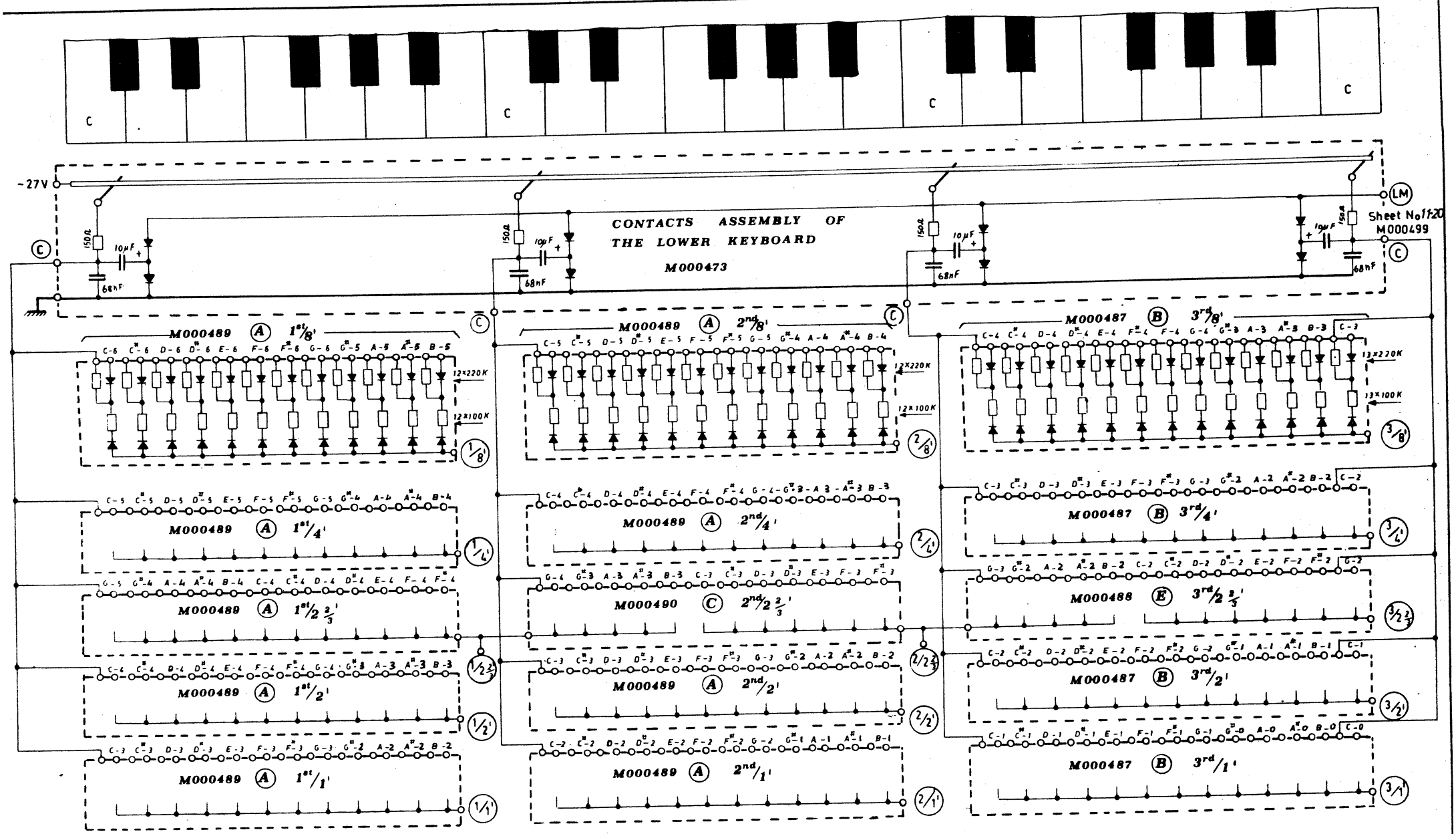
Code	Type	Transistors
T62÷T64	PNP	BC 154 Fairchild

Note:

1) All diodes are FDH 0666 Fairchild

2) All resistors marked be a point • must be carbon film ones 2% tollerance

	Model	Object:	Sheet No 4-20
	X55/P	Piano Switches and Filters	Date 22-10-75

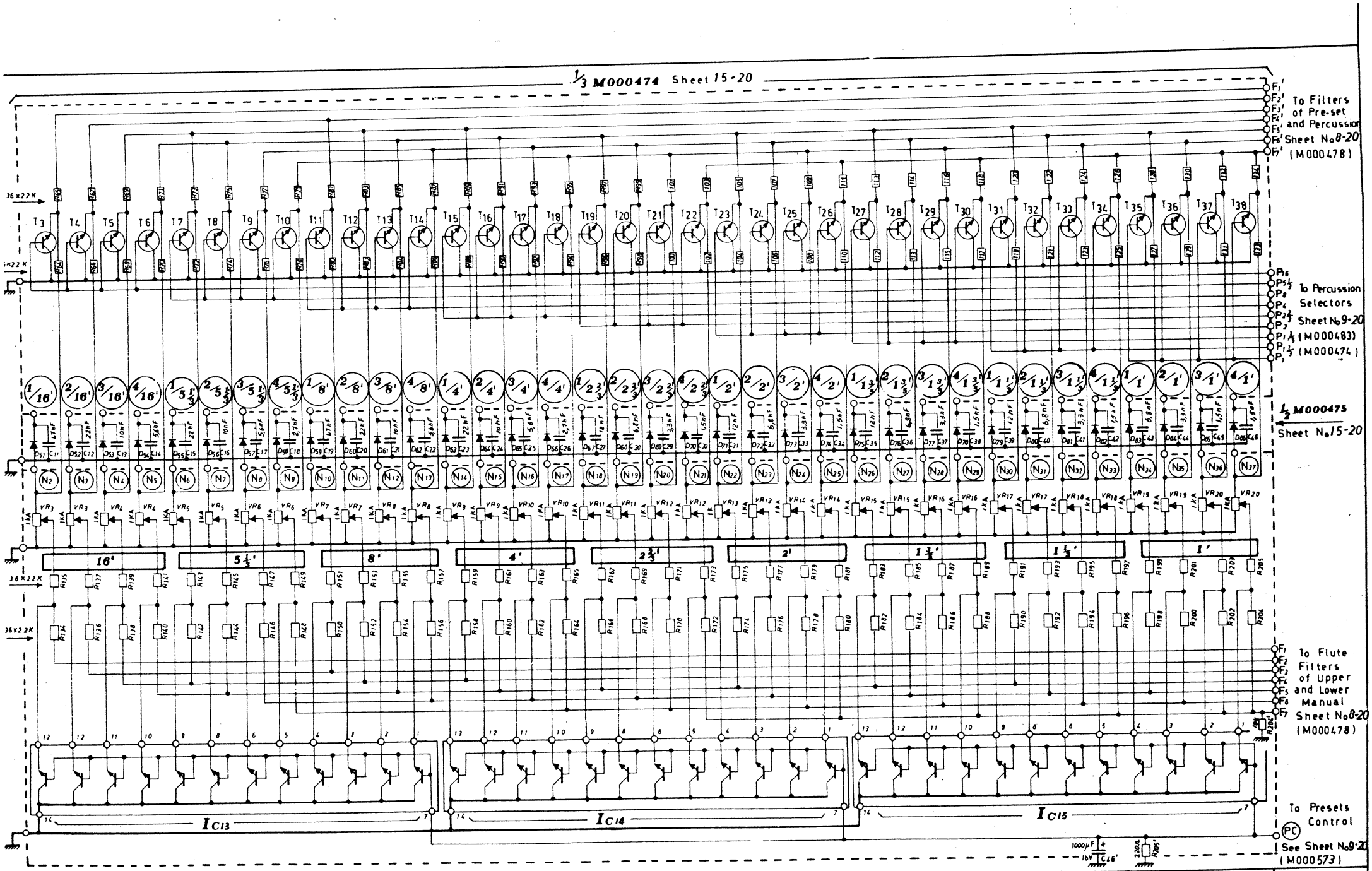


Note:

2) All diodes are FDH 0666 Fairchild

The Outputs 1/8 2/8 etc..... should be connected to board M000475 (Sheet No 7-20)

	Model X 55/P	Object: Lower Keyboard	Sheet No 5-20
			Date 12-3-75

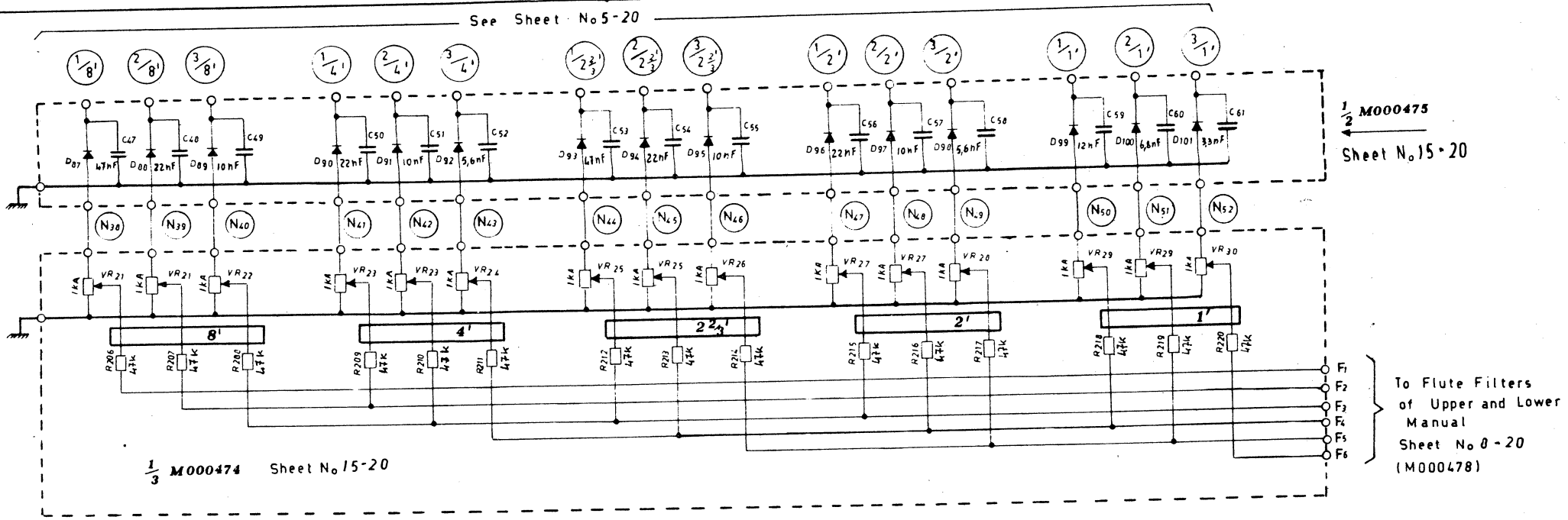


Code	Type	Transistors
T3-T38	NPN	F 33805 Fairchild-or BC 170 I.T.T. BC 108-BC 109-BC 208-BC 209-AU9

$IC_{13} \div IC_{15}$ = TDA 0470 ITT

Note:
2) All diodes are FDH 0666 Fairchild

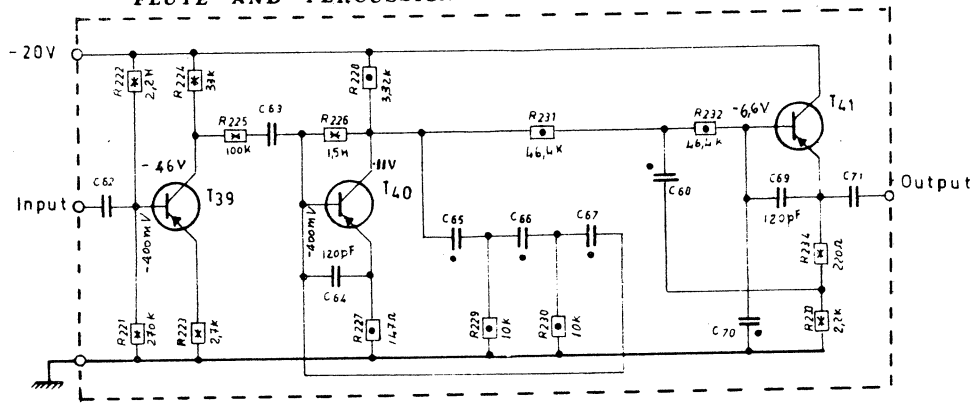
Model	Object:	Sheet No 6-20
X 55 / P	Upper Manual Draw Bars	Date 17-3-75



Note:

1) All diodes are FDH 0666 Fairchild
2) All resistors marked by a point • must *be metal* film ones 2 % tollerance
3) All resistors marked by a asterisk x must be carbon film ones 5 % tollerance
4) All *capacitors* marked by a point • are polycarbonate 2% tollerance

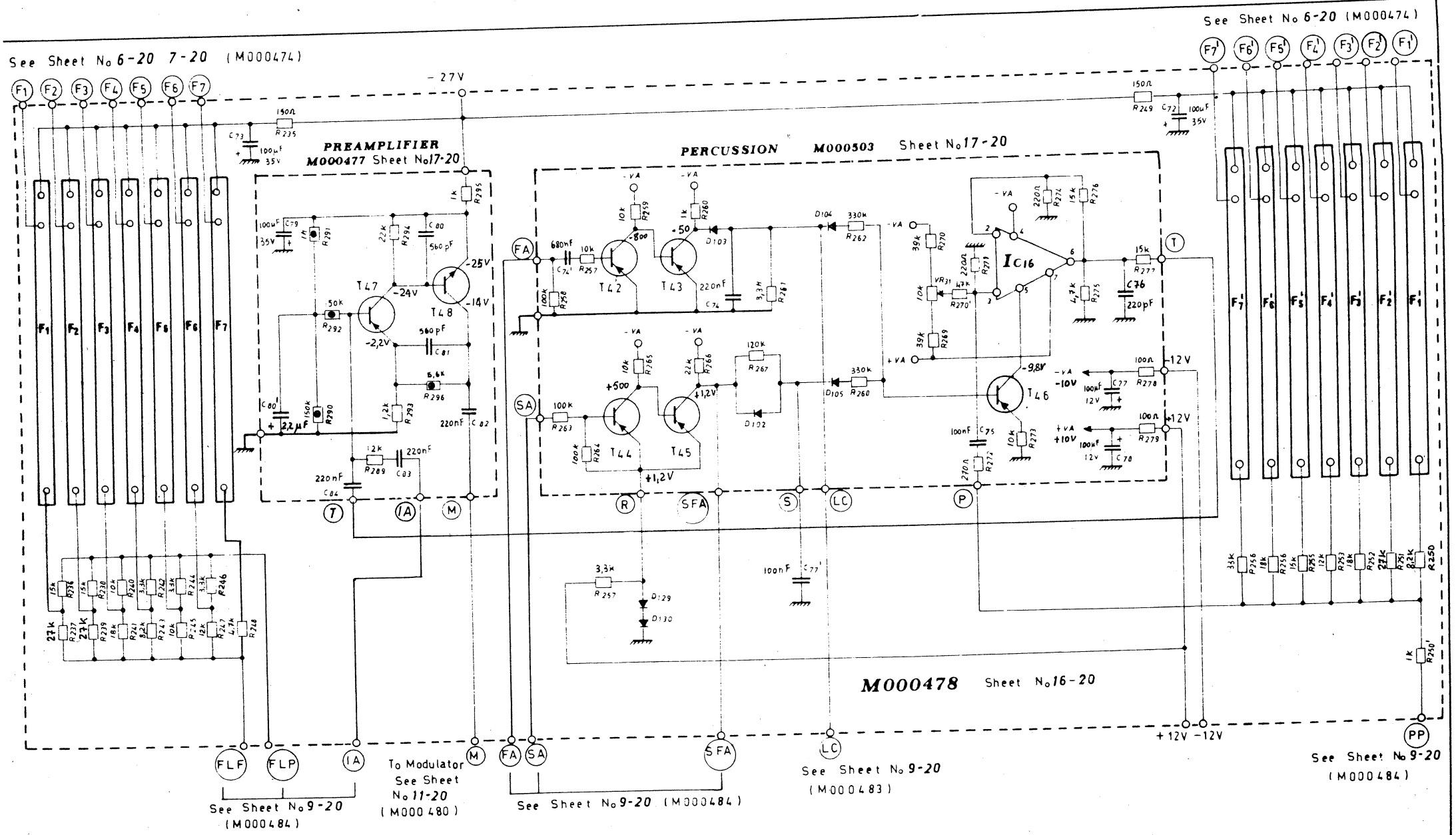
FLUTE AND PERCUSSION FILTERS F000445 Sheet No 16-20



Code	Type	Transistors
T_{39}÷T_{41}	PNP	BC 154 Fairchild or low noise transistors point red 300<HFE<400

	FLUTE FILTERS							PERCUSSION AND PRESETS FILTERS						
	F_1	F_2	F_3	F_4	F_5	F_6	F_7	F_1'	F_2'	F_3'	F_4'	F_5'	F_6'	F_7'
C62	330nF	220nF	100nF	47nF	27nF	12nF	6,8nF	330nF	220nF	100nF	47nF	27nF	12nF	6,8nF
C63	82nF	47nF	22nF	10nF	5,6nF	2,7nF	1,2nF	82nF	47nF	22nF	10nF	5,6nF	2,7nF	1,2nF
C65	47,2nF	23,6nF	11,8nF	5,9nF	2,95nF	1475pF	737pF	47,2nF	23,6nF	11,8nF	5,9nF	2,95nF	1475pF	737pF
C66	47,2nF	23,6nF	11,8nF	5,9nF	2,95nF	1475pF	737pF	47,2nF	23,6nF	11,8nF	5,9nF	2,95nF	1475pF	737pF
C67	47,2nF	23,6nF	11,8nF	5,9nF	2,95nF	1475pF	737pF	47,2nF	23,6nF	11,8nF	5,9nF	2,95nF	1475pF	737pF
C68	176nF	88nF	44nF	22nF	11nF	5,5nF	2750pF	176nF	88nF	44nF	22nF	11nF	5,5nF	2750pF
C70	16nF	8nF	4nF	2nF	1nF	500pF	250pF	16nF	8nF	4nF	2nF	1nF	500pF	250pF
C71	100nF	100nF	100nF	47nF	22nF	10nF	4,7nF	100nF	100nF	100nF	47nF	22nF	10nF	4,7nF

	Model	Object:	Sheet No 7-20
	X 55/P	Lower Manual Draw Bars and Filters	Date 26-3-75



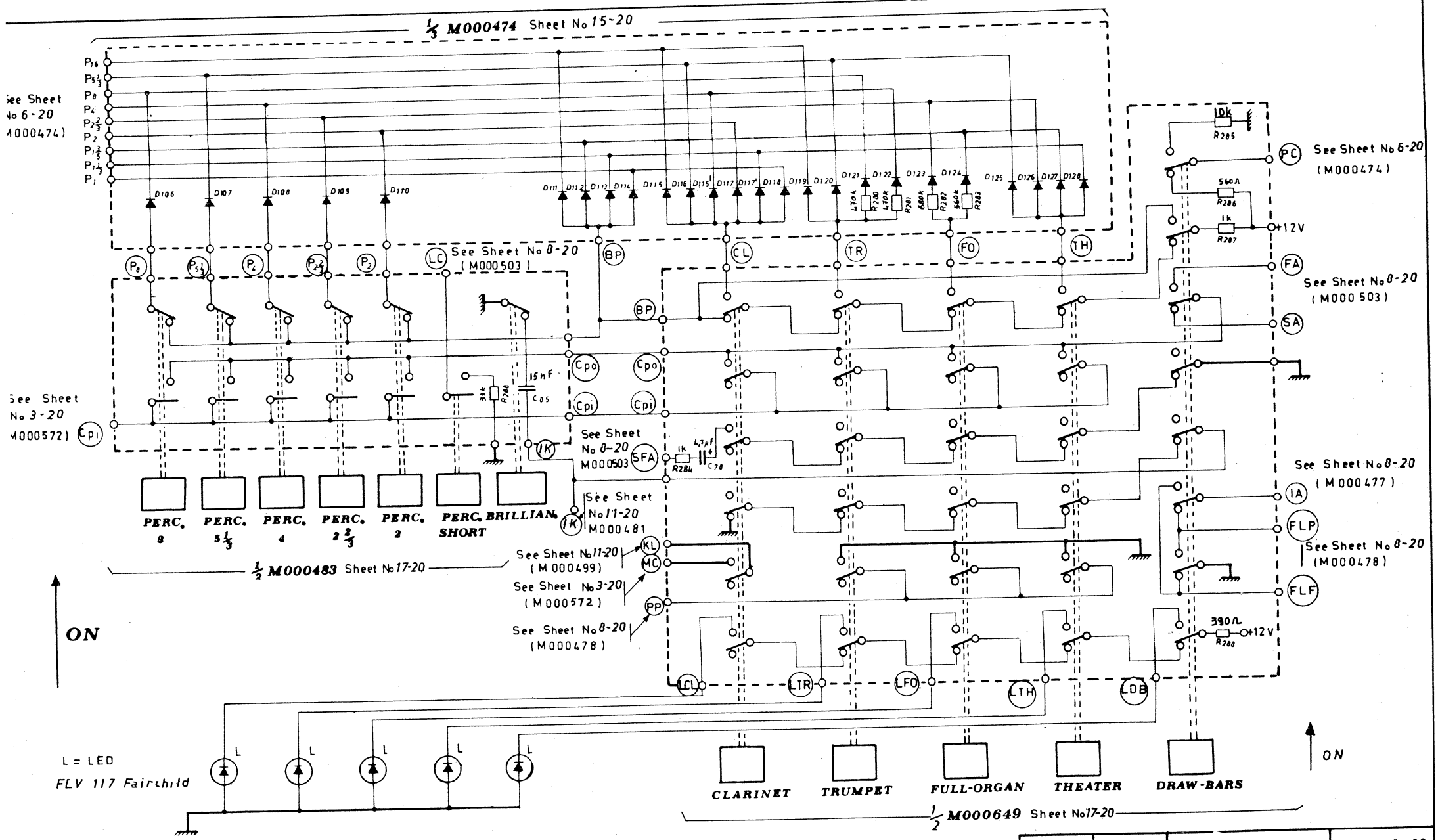
Code	Type	Transistors
T42÷T47	PNP	BC 154 Fairchild
T48	NPN	BC208-BC209 Fairchild

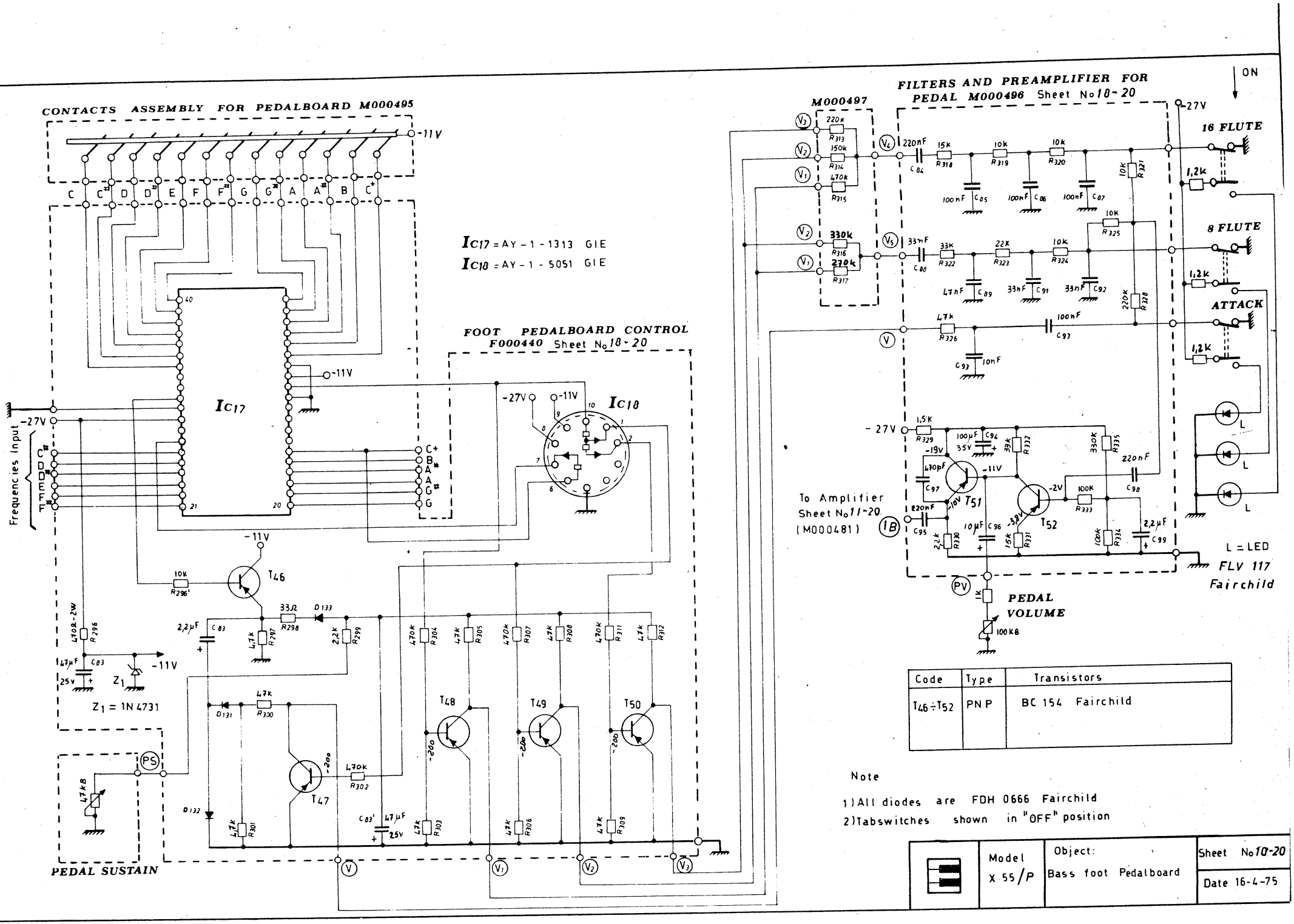
IC_{16} = CA 3080 R.C.A.

Note 1) All diodes are FDH 0666 Fairchild

2) All resistors marked be a point • must by metal film ones 5 % tollerance

Model	Object	Sheet N 0-20
X 55/P	Flute and Percussion Filters	Date 9-4-75


1/3 M000474 Sheet No 15-20
See Sheet No 6-20 (M000474)
See Sheet No 8-20 (M000503)
See Sheet No 3-20 (M000572)
See Sheet No 8-20 (M000503)
See Sheet No 11-20 (M000481)
See Sheet No 11-20 (M000499)
See Sheet No 3-20 (M000572)
See Sheet No 8-20 (M000478)
See Sheet No 6-20 (M000474)
See Sheet No 8-20 (M000503)
See Sheet No 8-20 (M000477)
See Sheet No 8-20 (M000478)
1/2 M000483 Sheet No 17-20
1/2 M000649 Sheet No 17-20
PERC. 8
PERC. 5 1/3
PERC. 4
PERC. 2 2/3
PERC. 2
PERC. SHORT
PERC. BRILLIAN.
CLARINET
TRUMPET
FULL-ORGAN
THEATER
DRAW-BARS
ON
L = LED
FLV 117 Fairchild
Note
1) All diodes are FDH 0666 Fairchild
2 Tabswitches shown in "OFF" position
Model X-55/P
Object Presets and Percussion control
Sheet No 9-20
Date 15-4-75



Code	Type	Transistors
T46÷T52	PNP	BC 154 Fairchild

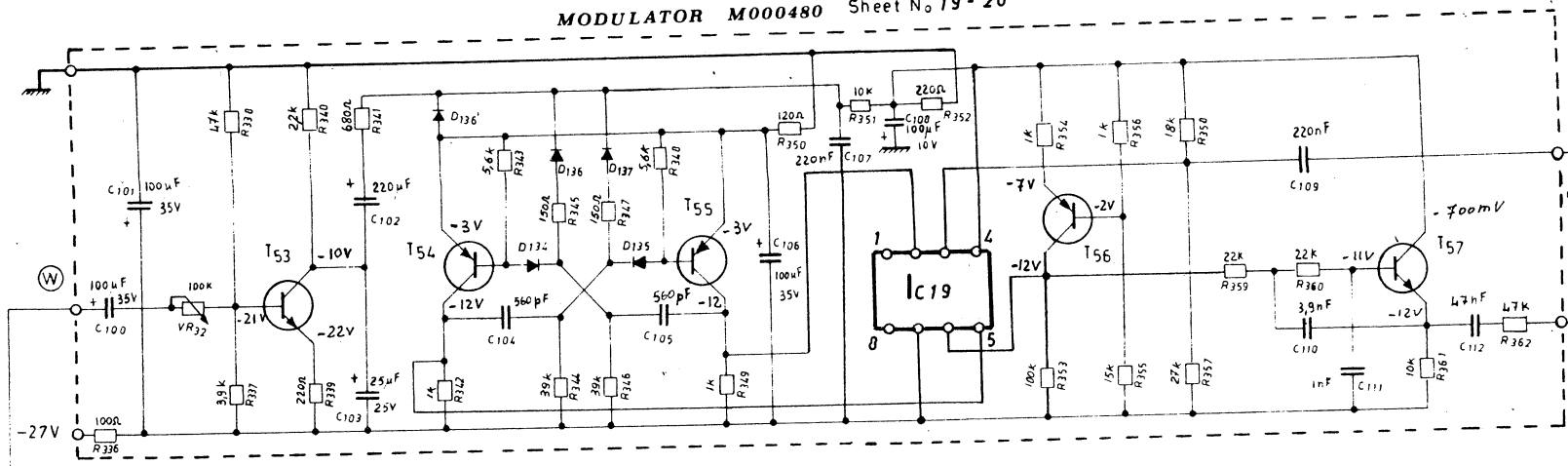
Note

1) All diodes are FDH 0666 Fairchild
2) Tabswitches shown in "OFF" position

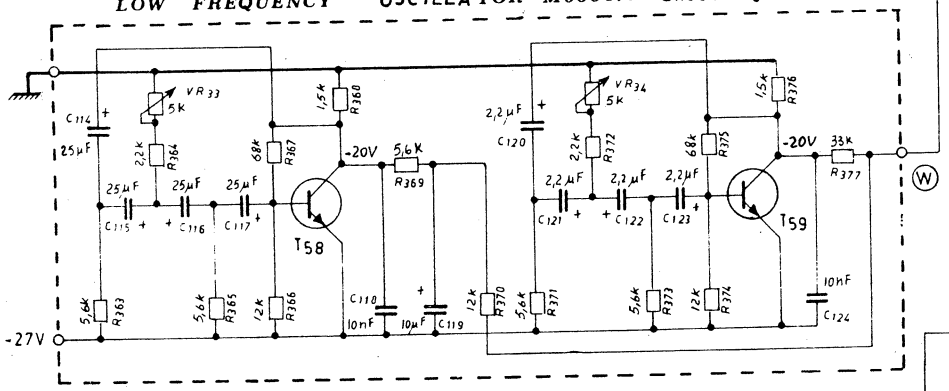
	Model	Object:	Sheet No 18-20
	X 55/P	Bass foot Pedalboard	Date 16-4-75

MODULATOR M000480 Sheet No 19 - 20

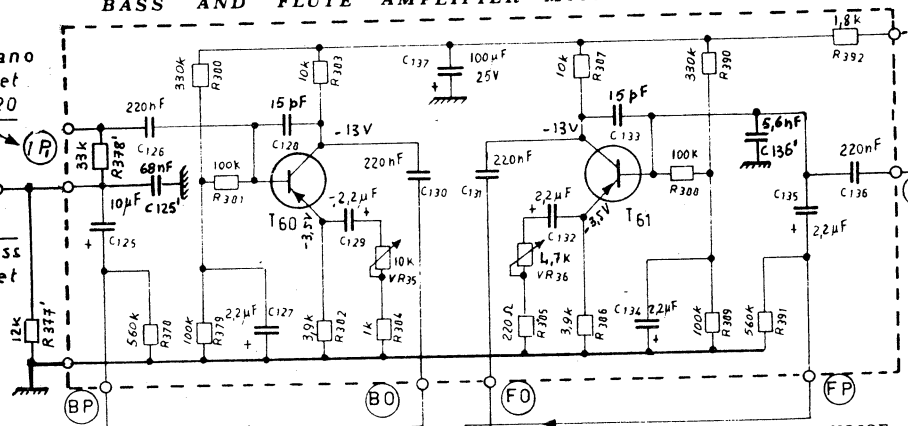
I_{C19} = TCA 350Y ITT



LOW FREQUENCY OSCILLATOR M000479 Sheet No 19-20



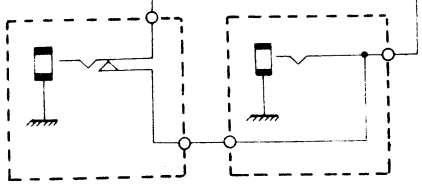
BASS AND FLUTE AMPLIFIER M000481 Sheet No 19-20

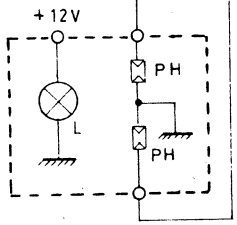


Code	Type	Transistors
T53-T57	NPN	BC 208 - BC 209 Fairchild - Mistral etc..
T58-T59		
T54-T55	PNP	BC 205 C Mistral
T56-T60 T61	PNP	BC 154 Fairchild

Note:

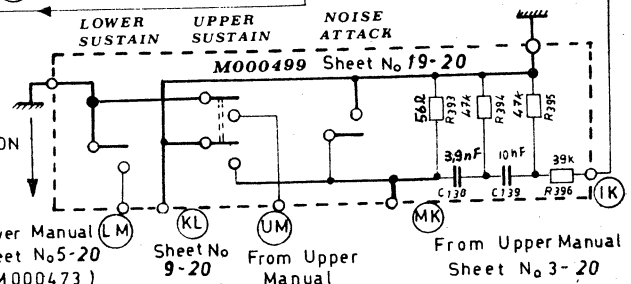
1) All diodes are FDH 0666 Fairchild
2) Tabswitches shown in "OFF" position





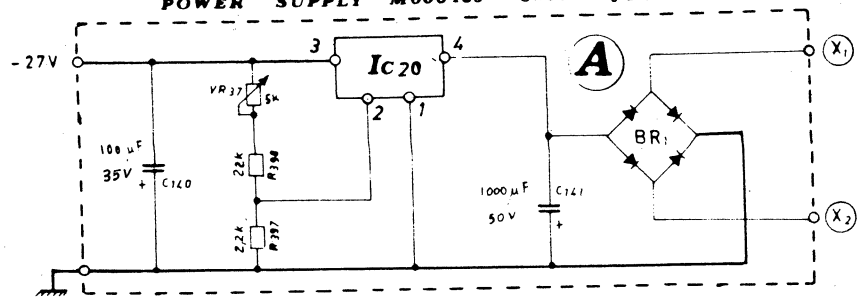
PEDAL VOLUME

PH = B 873103 Philips
L = 12V - 3W Philips

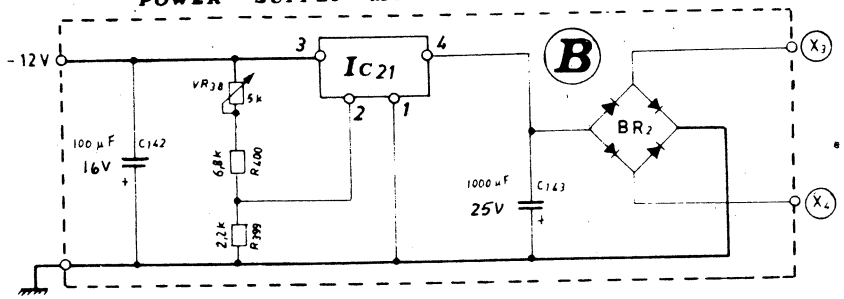


	Model	Object:	Sheet No 11-20
	X-55/P	Modulator Low Frequency Oscillator and Amplifier	Date 18-4-75

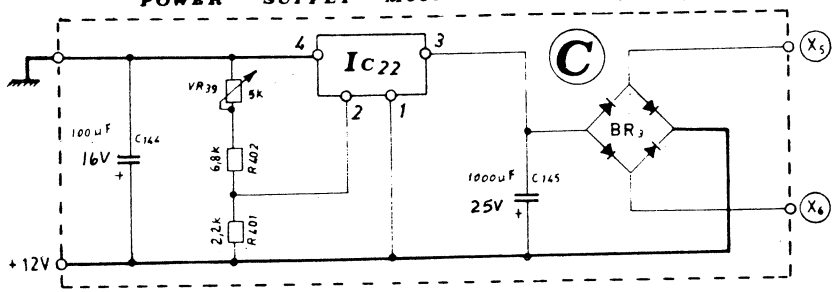
POWER SUPPLY M000485 Sheet No 20-20



POWER SUPPLY M000485 Sheet No 20-20

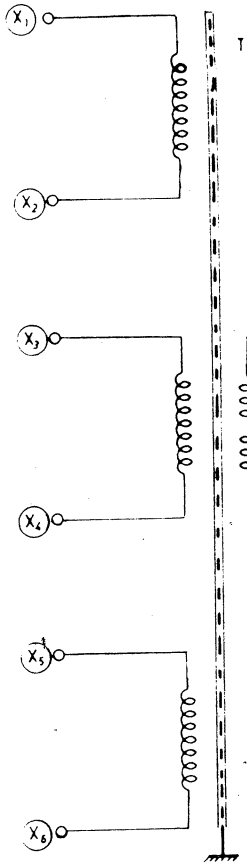


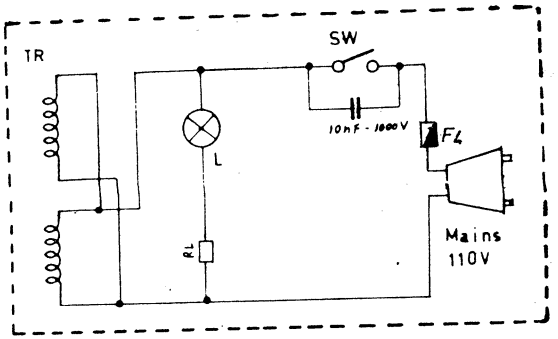
POWER SUPPLY M000485 Sheet No 20-20

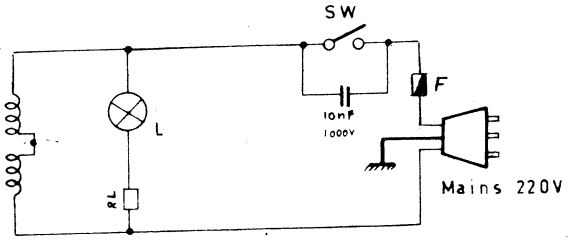


$IC_{20} \div IC_{22}$ = µA 79 MG Fairchild

BR_1 = W02 G.I.E.
BR_2 = W02 G.I.E.
BR_3 = W02 G.I.E.







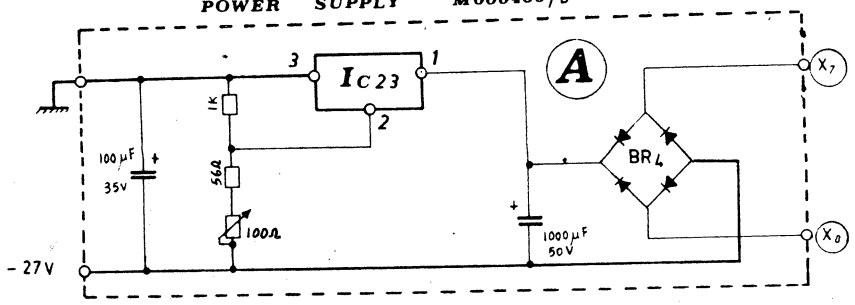
TR'= T 073
SW + L = Single pole switch and pilot light
F = Fuse 315 mA
F_4 = Fuse 500 mA

According to the firm's requirements, in some instruments can be housed the power supplies indicated in sheet No 12-20 or 12a-20

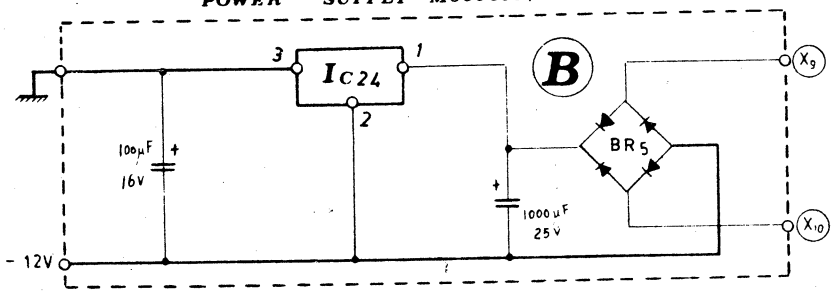
N.B.
Such power supplies are perfectly interchangeable between each other, providing they both have the same stabilized tension

	Mod	Object	Sheet No 12-20
	X 55/P	Power Supply	Date 21-4-75

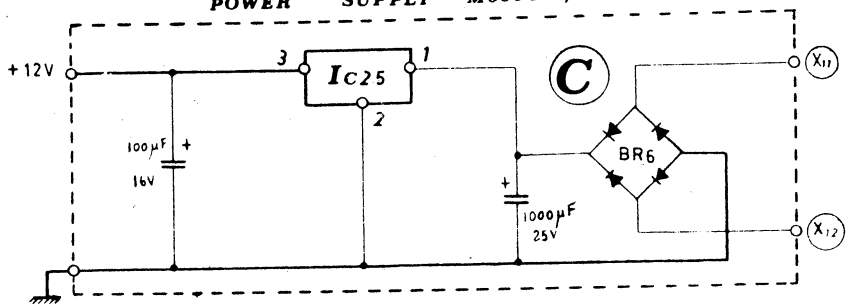
POWER SUPPLY M000485/b



POWER SUPPLY M000485/a



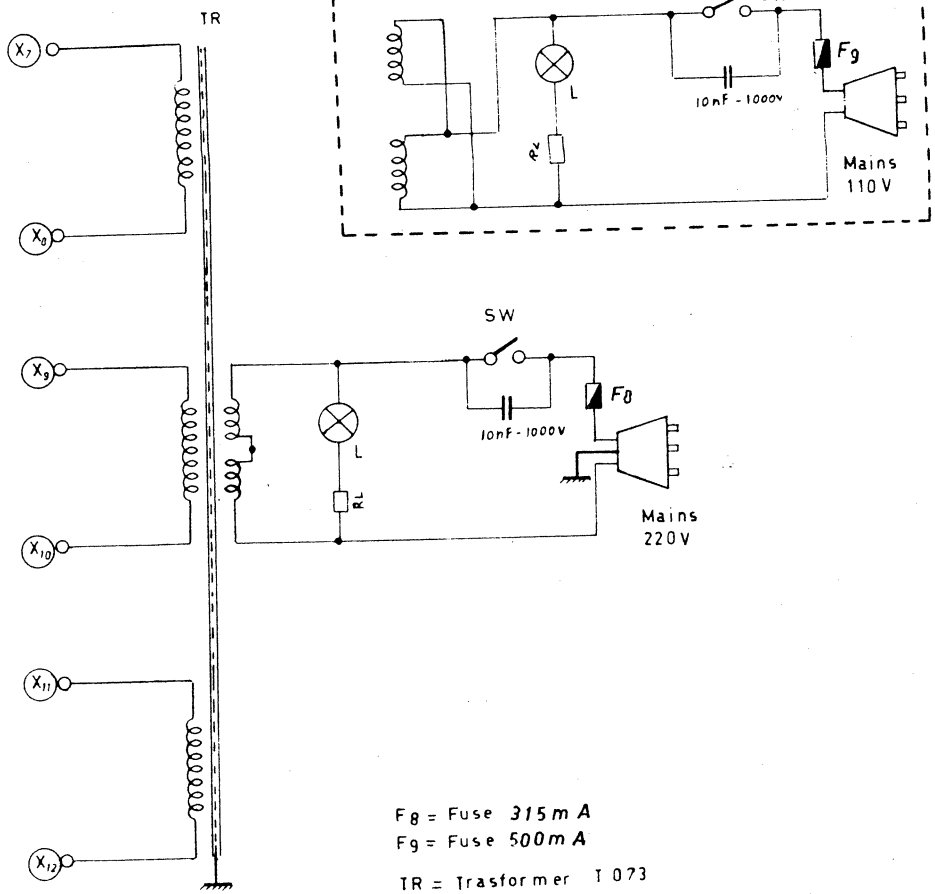
POWER SUPPLY M000485/a



IC_{23} = 78 M-24-UC Fairchild

IC_{24}-IC_{25} = 78 M-12-UC Fairchild

BR_4 = W02 GIE
BR5 = W02 GIE
BR6 = W02 GIE



F8 = Fuse 315 m A
F9 = Fuse 500 m A

TR = Trasformer T 073

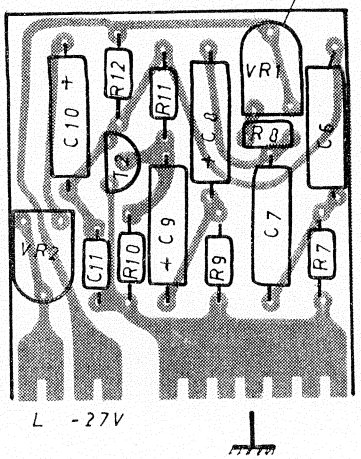
SW + L = Single pole switch and pilot light

According to the firm's requirements, in some instruments can be house the power supplies indicated in sheet No 12-20 or 12a-20

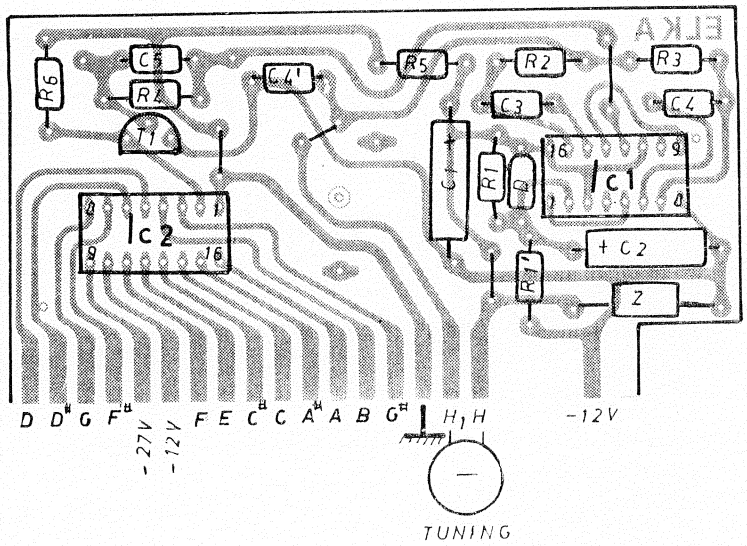
N. B
Such power supplies are perfectly interchangeable between each other, provinding they both have the same stabilized tension

	Model	Object	Sheet No 12a-20
	X 55/P	Power Supply	Date 14-5-75

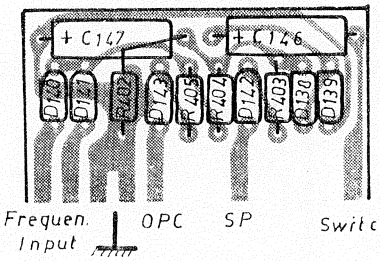
M000470



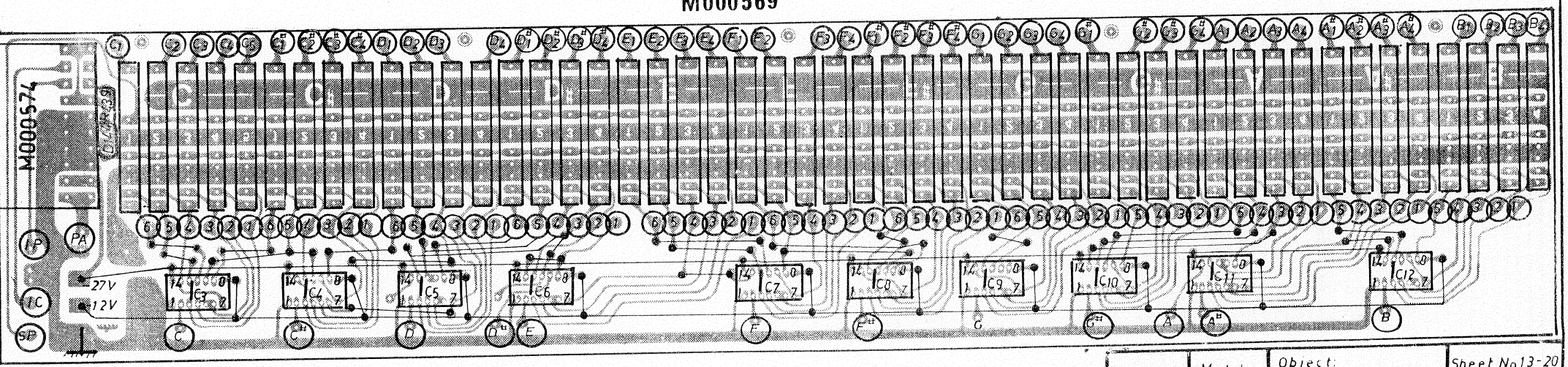
M000468



M000571

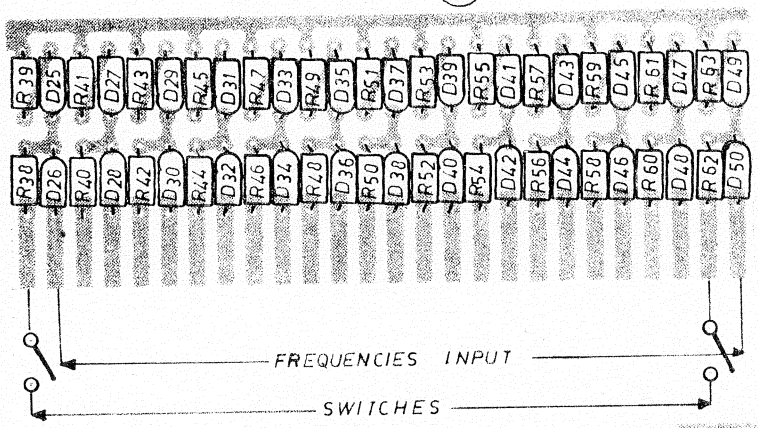


M000569

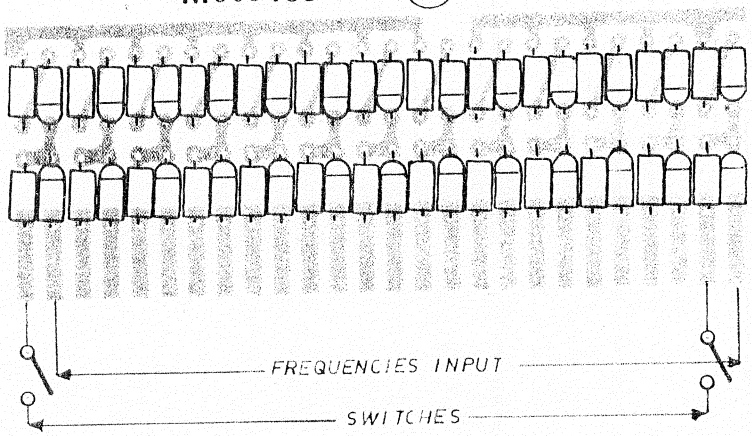


	Model X55/P	Object: Assembly of Printed Circuit	Sheet No 13-20
			Date 3-11-75

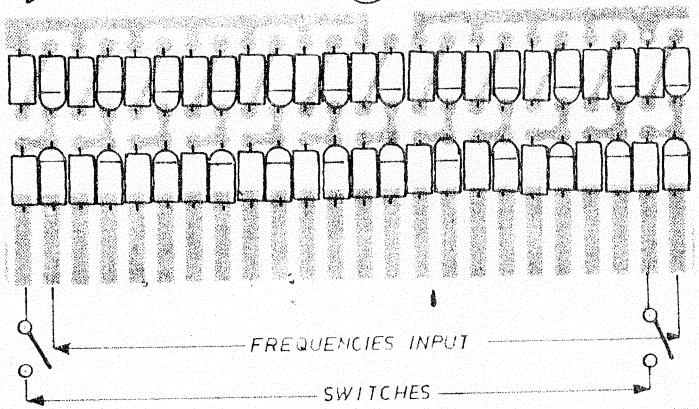
M000487 (B) 11



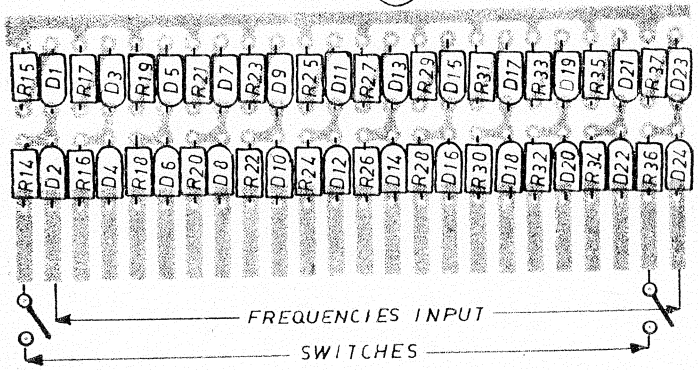
M000488 (E) 3



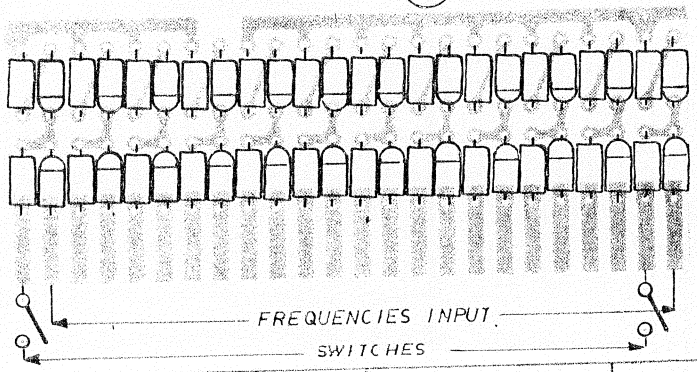
M000490 (C) 8



M000489 (A) 26

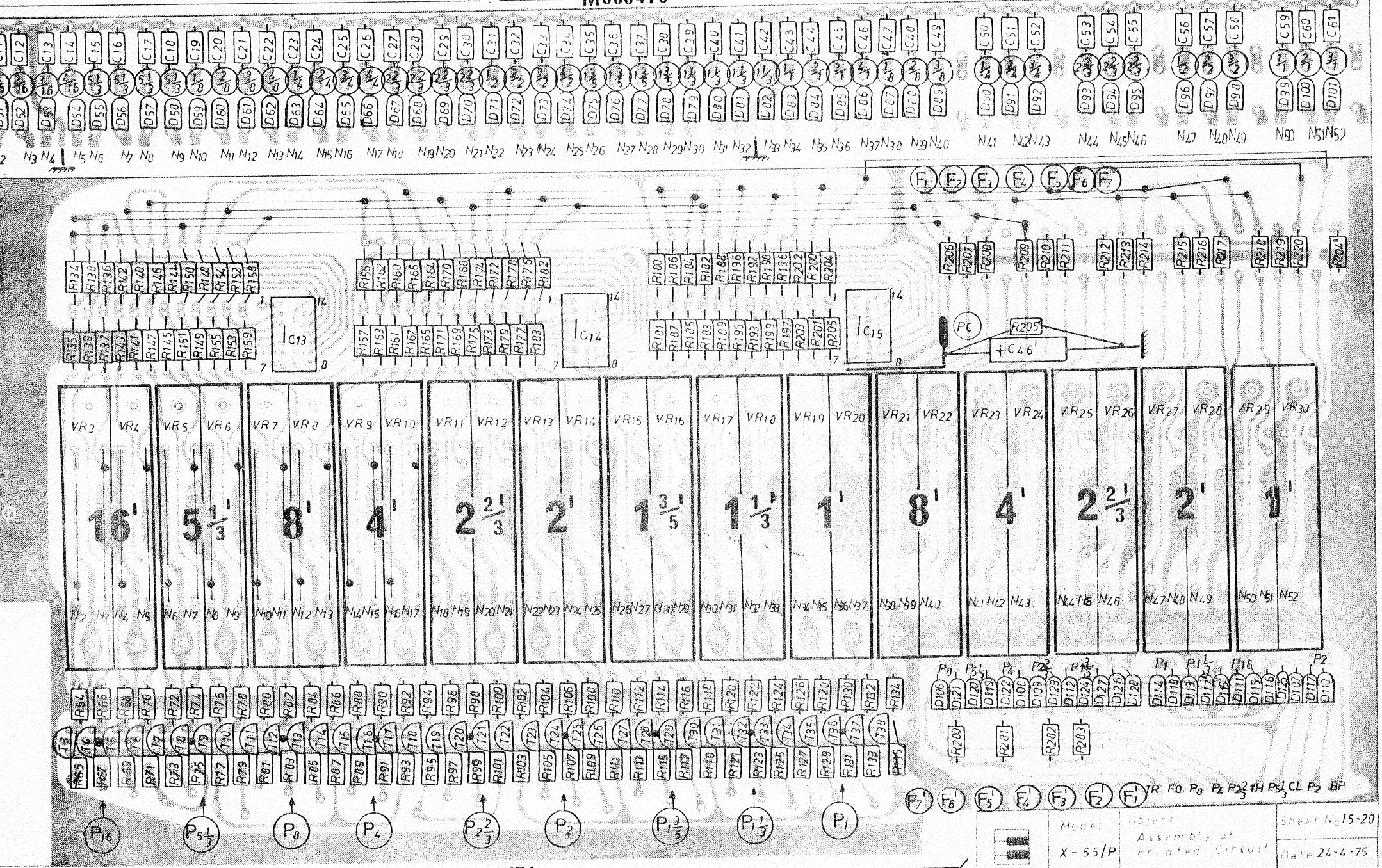


M000491 (D) 3



	Model X-55/P	Object Assembly of Printed Circuit	Sheet No 14-20
			Date 23-4-75

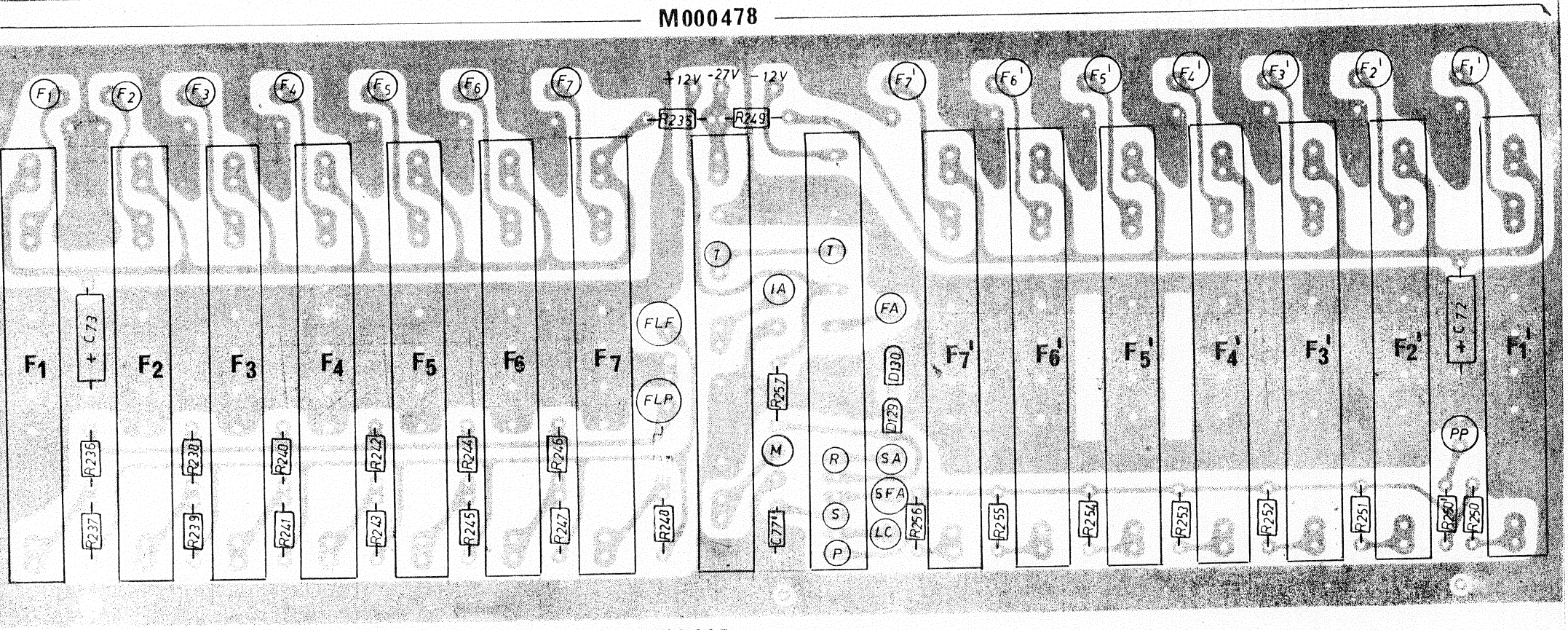
M000475



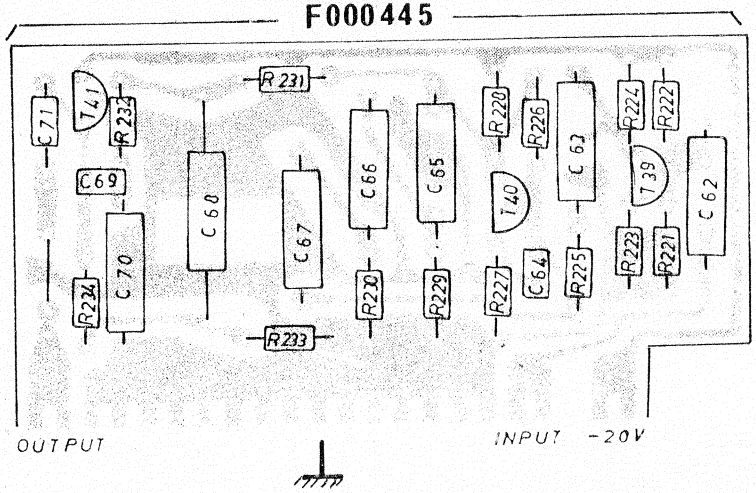
	Model X-55/P	Sheet Assembly of Printed Circuit	Sheet No 15-20
			Date 24-4-75

M000474

M000478

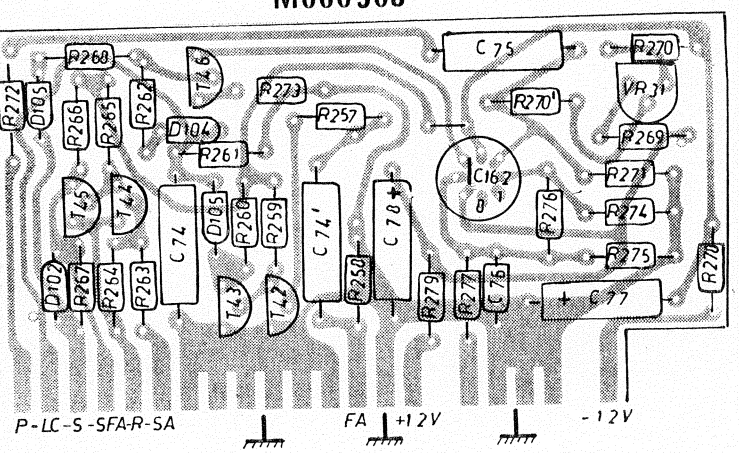


F000445

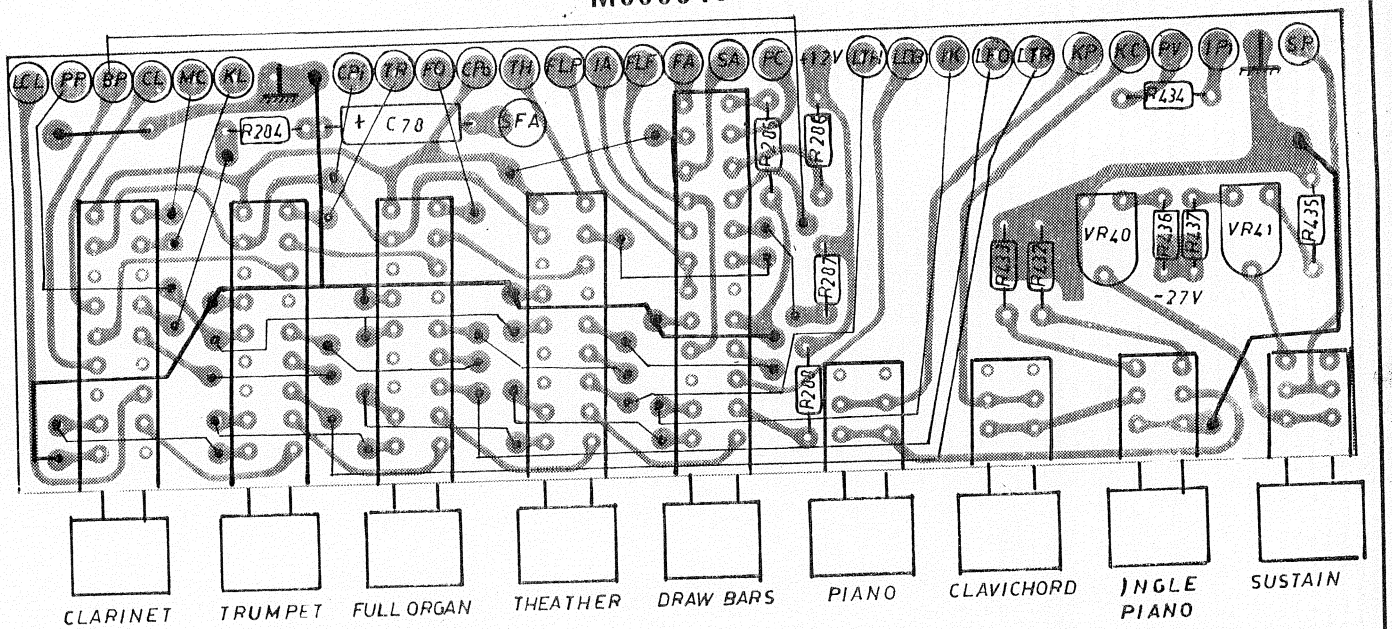


	Model X-55/P	Object Assembly of Printed Circuit	Sheet No 16-20
			Date 28-4-75

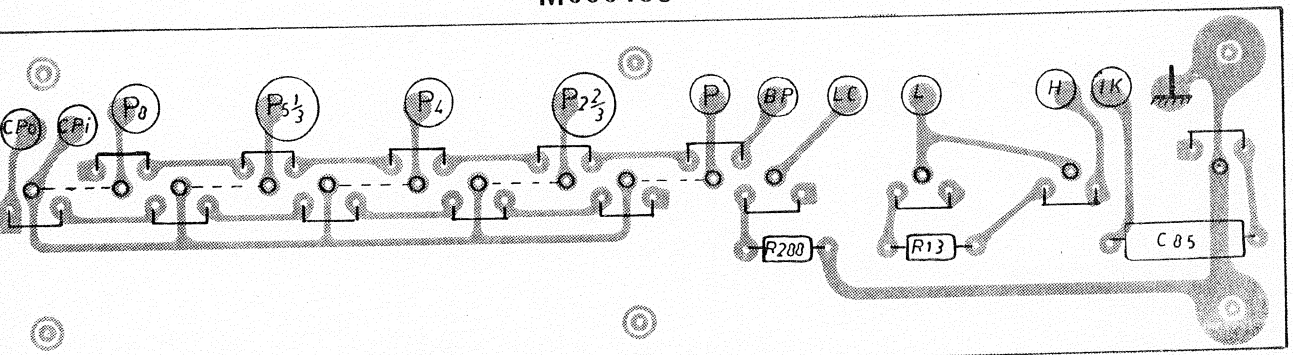
M000503



M000649

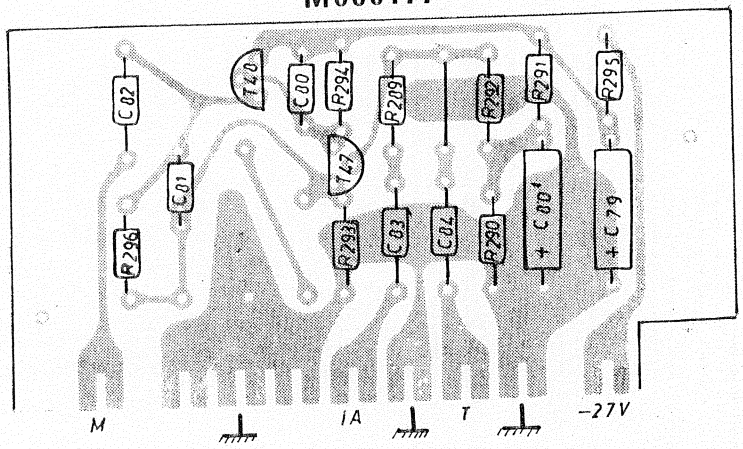


M000483



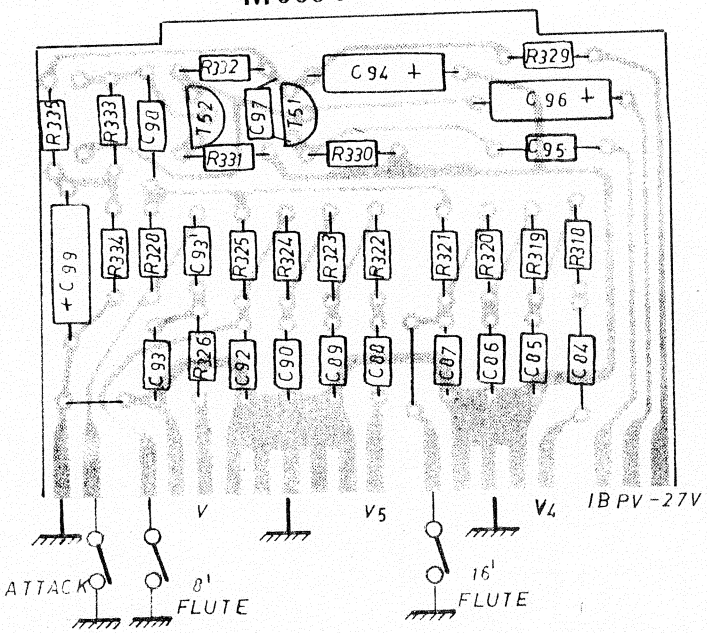
PERCUSSION	PERCUSSION	PERCUSSION	PERCUSSION	PERCUSSION	PERC. LONG	VIBRATO LIGHT	VIBRATO FULL	BRILLIAN.

M000477

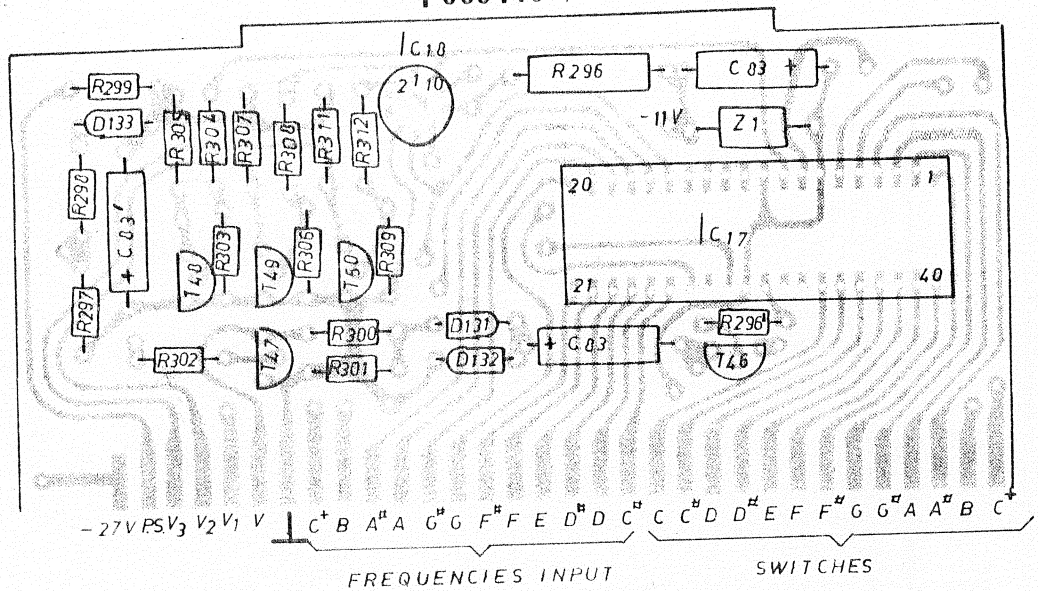


	Model	Object	Sheet No 17-20
	X55-P	Assembly of Printed Circuit	Date 15-4-76

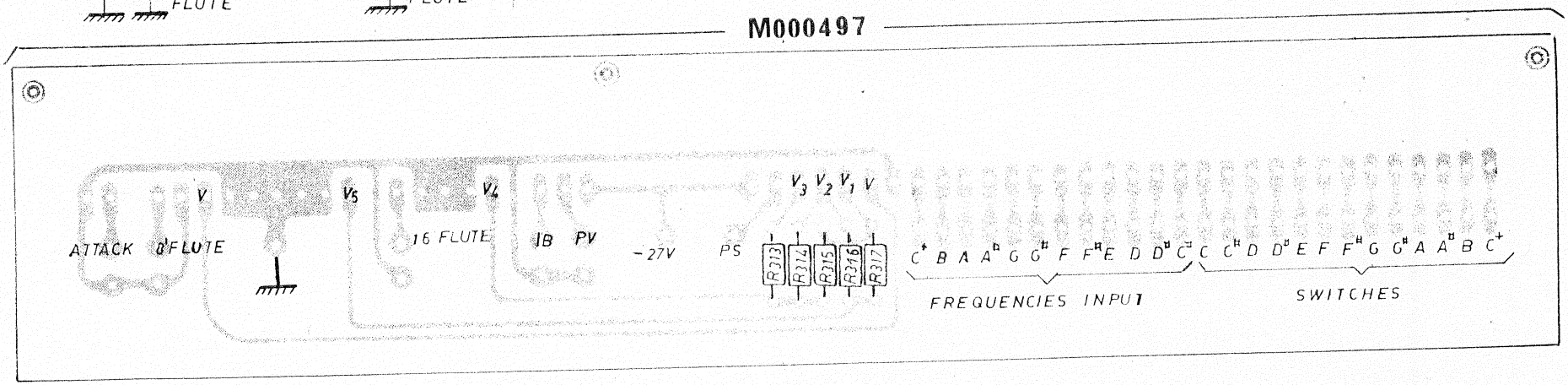
M000496



F000440

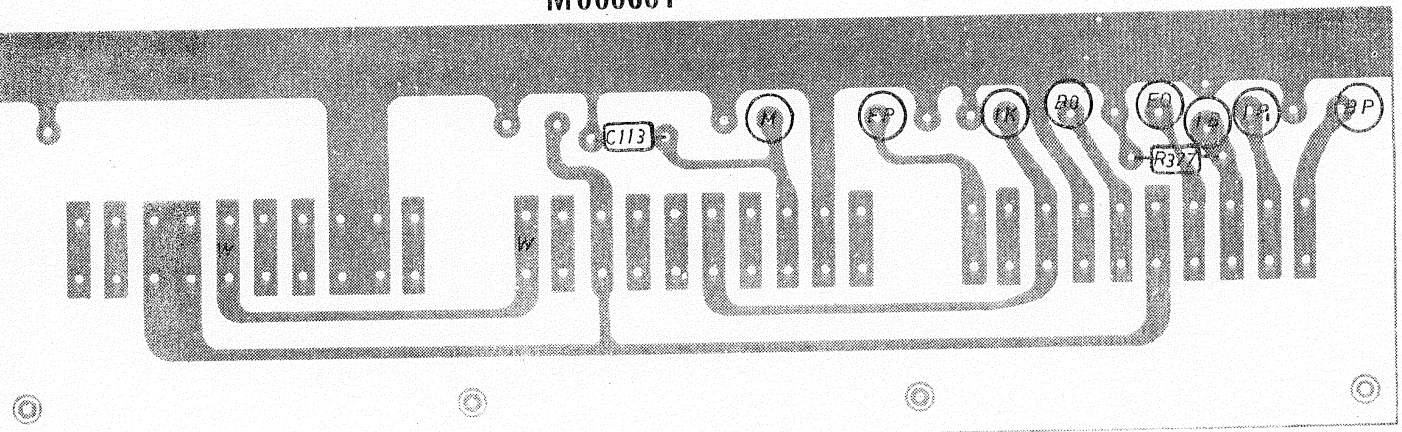


M000497

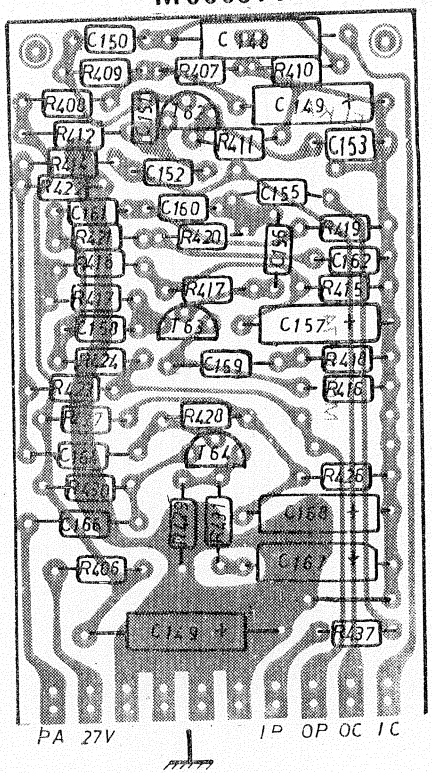


	Model X 55/P	Object Assembly of Printed Circuit	Sheet No 18-20
			Date 29-4-75

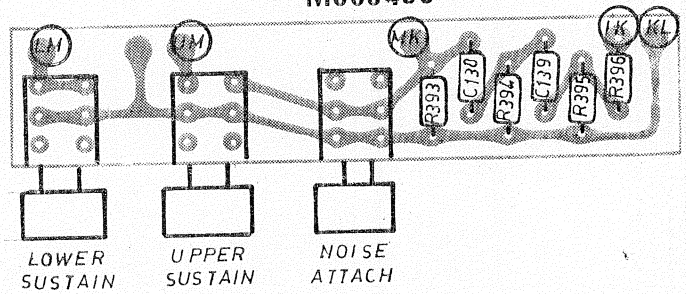
M000601

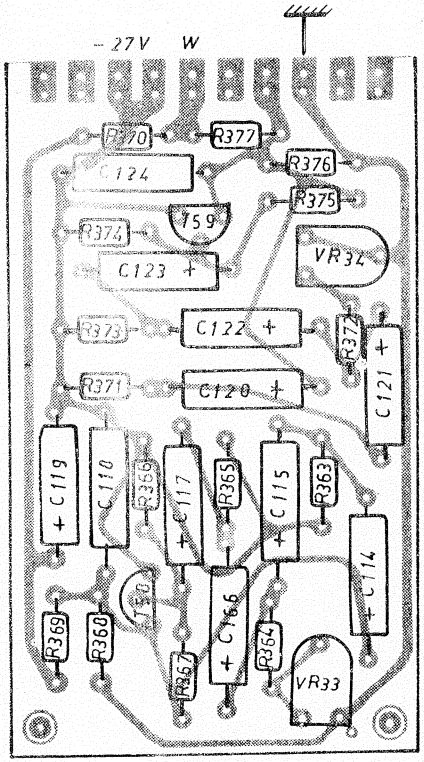


M000574

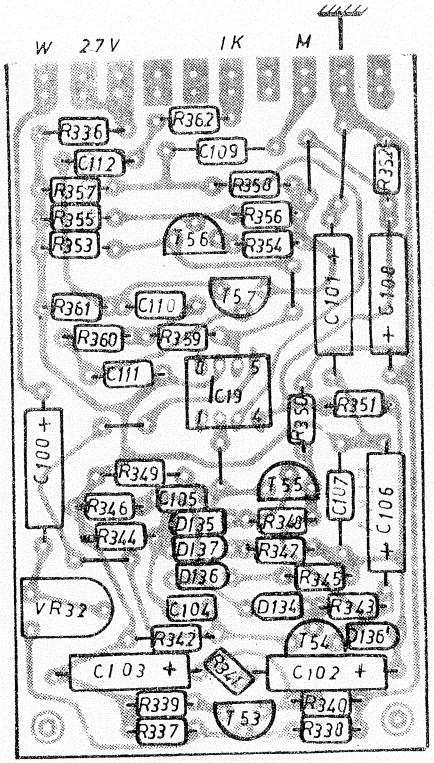


M000499

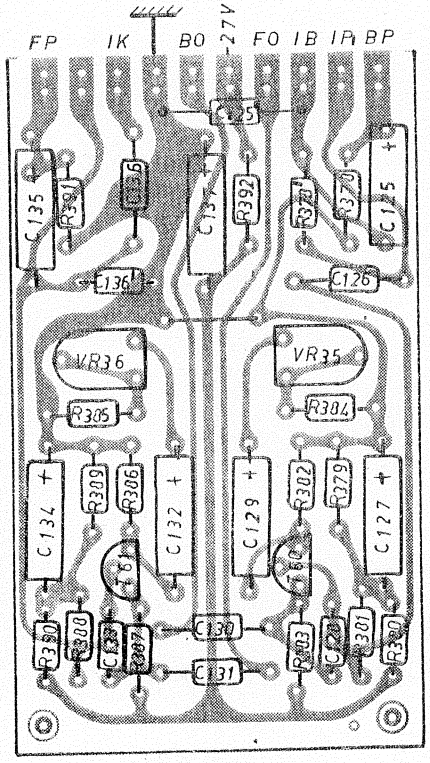




M000479



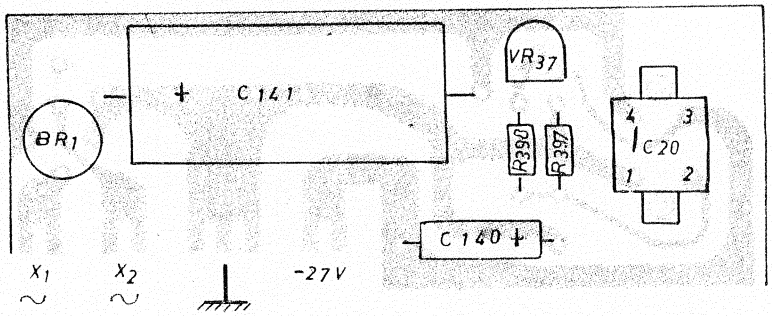
M000480



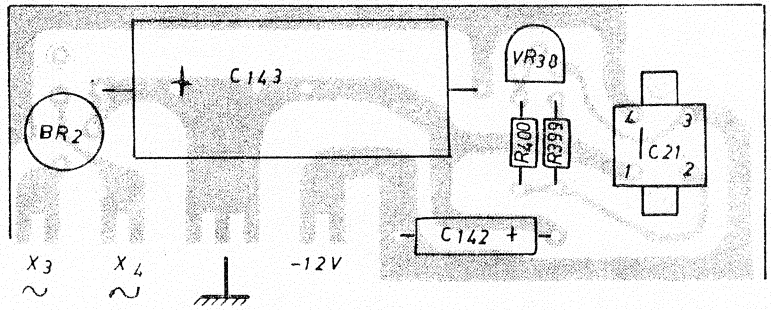
M000481

	Model X55/P	Object: Assembly of Printed Circuit	Sheet No 19-20
			Date 26-11-76

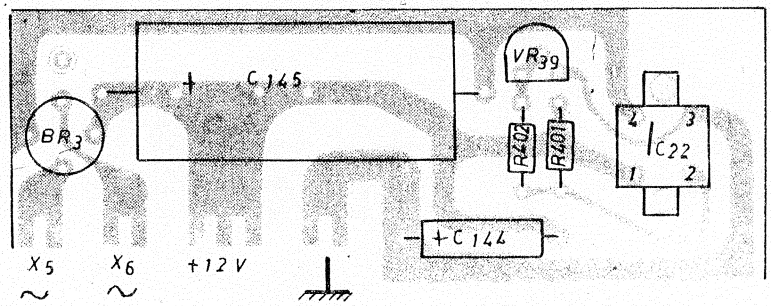
M000485 **A**



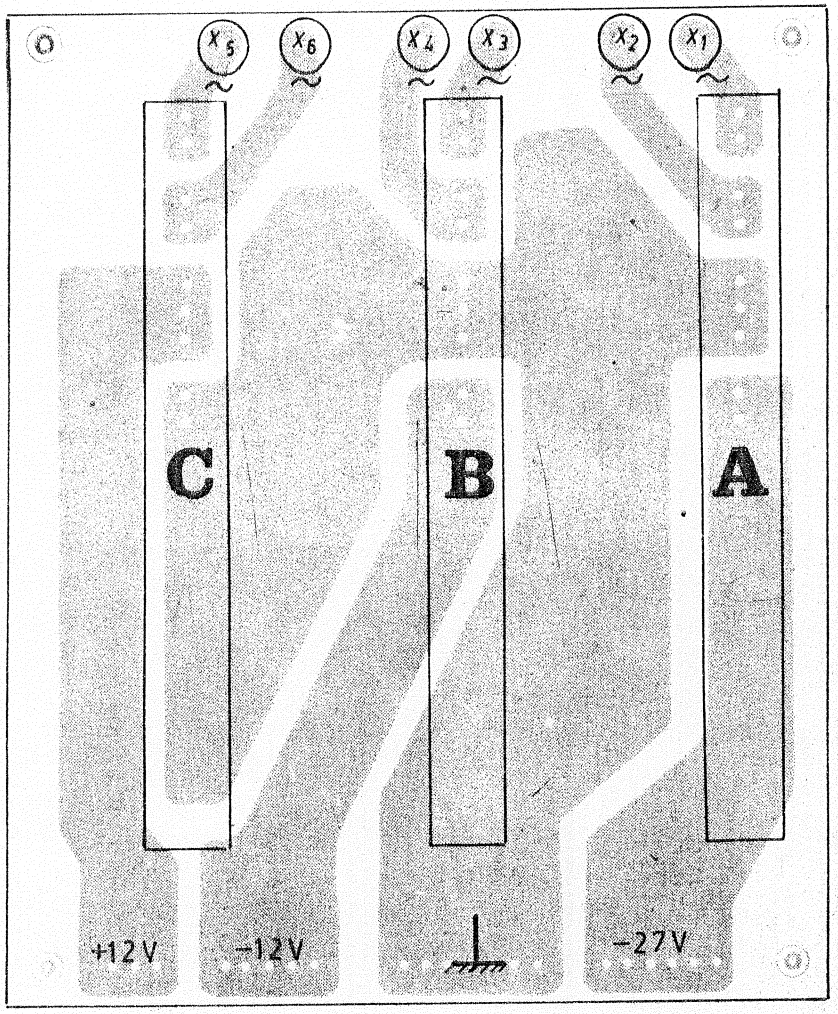
M000485 **B**



M000485 **C**



M000486



	Model	Object:	Sheet No. 20-20
	X 55/P	Assembly of Printed Circuit	Date 30-4-75